

REMARKS/ARGUMENTS

Reconsideration of the above-identified application in view of the present amendment is respectfully requested. By the present amendment, claims 1, 2, and 4-13 are amended, and claim 3 is canceled. Claims 1, 2, and 4-13 are currently pending. Claims 1, 2, and 4-13 are amended to replace "characterized in that" with "wherein" for better form. These amendments to claims 1, 2, and 4-13 are not done to further distinguish over the prior art.

Applicant appreciates the allowance of claim 9 if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Accordingly, claim 9 is amended to include all of the limitations of the base claim and intervening claims. Therefore, claim 9 is allowable.

Regarding item 1 of the office action, "Karsten Schwuchow" is the correct spelling of the inventor's name. Thus, the objection to the oath/declaration should be withdrawn. Regarding item 2 of the office action, the specification is amended to delete the reference sign "36". Thus, this objection to the drawing should be withdrawn.

Regarding item 3 of the office action, claims 1 and 10 are amended to correctly recite reference number 34 as identifying the thermal insulating foil layer. Claim 1 recites that the insulation foil (24) comprises a base layer (32) and at least one thermally insulating foil layer (34) with a varying thickness. This is fully supported in the specification and drawings. The specification specifically states that the insulating foil layer 34 may be applied only to certain portions of the base layer 32 and thus may have a thickness of zero at certain locations on the base layer. (See, for example, paragraphs [0007] and [0023] of the published application - US

2004/0126290 A1). Therefore, what the Examiner calls "several pieces of plastic" is one foil layer, the thickness of which is, in parts, zero (see Fig. 2), as clearly set forth in the specification. Furthermore, Fig. 4 shows an insulating foil layer having regions 134, 136, and 138 of different thickness. Thus, the objection to the drawings set forth in item 3 of the Office Action should be withdrawn.

Regarding objection to the disclosure at items 4 and 5 of the Office Action, Applicants respectfully submit that the disclosure is sufficient for that a person of ordinary skill in the art would be able to determine materials and/or thicknesses that would achieve the desired results without undue experimentation. The specification clearly identifies plastic materials as those being used to construct the thermal insulation layers. (See, e.g., paragraph [0008]). The specification also clearly states that plastics have strengths that are lowered as their temperature increases. (See, e.g., paragraph [0009]). The specification also states that the strength of the insulating foil layer can be tailored or selected by choosing the thickness of the thermal insulation layers. (See, e.g., paragraphs [0005-0008]). The specification further states that the thickness of the insulating foil layer can be adjusted to tailor opening of the foil layer depending on ambient conditions. For example, as set forth in paragraph [0028], the thinnest foil layers open throughout the entire ambient temperature range, whereas the thicker layers open only at elevated ambient temperatures.

Those skilled in the art will appreciate that a specific type of plastic is not required to practice the invention. The present invention teaches that the thickness of the plastic can be tailored so as to reach a predetermined isolation of the base layer allowing the insulation foil to rupture only under certain threshold ambient

temperatures. Without undue experimentation, one having ordinary skill in the art could easily ascertain the requisite thickness of the thermal insulation foil layer for any particular type of plastic and any particular ambient temperature. Therefore, the objection to the disclosure set forth in items 4 and 5 is improper and should be withdrawn.

Regarding, item 7 of the office action, claim 10 is amended to correct the reference number denoting the thermal insulating foil layer (34). Furthermore, the specification discloses, at paragraph [0010], that the base layer may be embedded between two thermally insulating foil layers, in order to delay heating from both sides." Thus, the specification clearly discloses applying the thermally insulating foil layer applied to both sides of the base layer. The specification does not limit the foil layer applied to the base layer as illustrated in Figs 1-4 and described in the specification as being limited to one side of the base layer only. Thus, one having ordinary skill in the art would certainly appreciate that, if the thermally insulating foil layers were applied to both sides of the base layer, they would be applied as illustrated in Figs 1-4 and described in the specification. Therefore, it is respectfully submitted that claim 10 complies with the enablement requirement and that the rejection under 35 U.S.C. §112, first paragraph, is improper and should be withdrawn.

Regarding the rejection of claims 11-13 under 35 U.S.C. §112, first paragraph, at item 8 of the office action, applicant respectfully submits that a person of ordinary skilled in the art knows which materials or which thicknesses that would enable the device without undue experimentation, and also through routine experimentation construct the insulation foil such that it performs each of the

functions in claims 11, 12, and 13. As set forth above in regard to items 4 and 5, the specification clearly identifies the thermal insulation layers as being constructed of plastic (paragraph [0008]), which has a strength that lowers as its temperature increases (paragraph [0009]). The specification also states that the strength of the insulating foil layer can be tailored or selected by choosing the thickness of the plastic thermal insulation layers (paragraphs [0005-0008]). The specification further states that the thickness of the insulating foil layer can be adjusted to tailor opening of the foil layer depending on ambient conditions. For example, as set forth in paragraph [0028], the thinnest foil layers open throughout the entire ambient temperature range, whereas the thicker layers open only at elevated ambient temperatures.

Those skilled in the art will appreciate that a specific type of plastic is not required to practice the invention. The present invention teaches that the thickness of the plastic can be tailored so as to reach a predetermined isolation of the base layer allowing the insulation foil to rupture only under certain threshold ambient temperatures. Without undue experimentation, one having ordinary skill in the art could easily ascertain the requisite thickness of the thermal insulation foil layer for any particular type of plastic and any particular ambient temperature. Therefore, the rejection of claims 11-13 under 35 U.S.C. §112, first paragraph, set forth in item 8 is improper and should be withdrawn.

Regarding item 10, Applicants respectfully submit that the transitional phrase in claim 1 does not prevent the further limitations of claims 2 and 4. The transitional phrase "comprising" is synonymous with "including," "containing," or "characterized by." It is inclusive or open-ended and does not exclude additional, unrecited

elements. See MPEP 2111.03. "Comprising" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim. Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948).

Based on the above, claim 1 is open ended and, thus, includes the base layer and at least one thermally insulating foil layer. Other elements may be added to claim 1 and still form a construct within the scope of the claim. Therefore, the recitation in claim 2 that the thermally insulating foil layer is a plastic layer is proper and does, in fact, limit the material of the foil layer to plastic. Similarly, the recitation in claim 4 that the base layer is made of metal is proper and does, in fact, limit the material of the base layer to metal. The Office Action sets forth no reasoning, rule, or precedent as to why claims 2 and 4 should not be given patentable weight. Therefore, Applicants respectfully submit that claims 2 and 4 do effectively limit the materials of the foil layer and base layer, respectively, and that claims 2 and 4 should be examined on their merits. The Office Action does not identify this structure in any of the cited references. Therefore, claims 2 and 4 should be allowed.

Regarding item 11, claim 6 has been amended to recite the spray coated foil layer in terms of its structure and not the manner of making the foil layer. The recitation of the foil layer as being a spray coating further defines the structure of the foil layer and is, therefore, patentably limiting. The references cited in the Office Action do not teach or suggest this structure. Therefore, claim 6 should be allowed.

Regarding item 12, Applicants are unsure of the significance of this comment. If this comment is meant to solicit acknowledgement of a proper understanding of what is meant by the limitations recited in claim 8, Applicants can verify that the thickness of the insulating foil layer is zero where there is no foil layer. Examination of claim 8 on the merits is respectfully requested.

Regarding item 13, Applicants respectfully submit that the elements recited in claim 1 cannot be considered inherent. As amended, claim 1 recites at least one destructible insulation foil which in a non-activated state of the gas generator closes at least one of the outflow openings so as to be moisture-tight. The insulation foil has a varying thickness due to the foil comprising a base layer and at least one thermally insulating foil layer with a varying thickness. The foil layer has a distinctly lower thermal conductivity than the base layer and lies over the base layer (32) on a side of the insulation foil (24) that faces a gas flow.

According to the doctrine of inherency, if an element is not expressly disclosed in a prior art reference, the reference will still be deemed to include the missing element if the missing element is "necessarily present" in the item described in the reference. Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991). "Necessarily present" for inherency means more than merely probably or possibly present. Trintec Industries, Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 1295 (Fed. Cir. 2002). Accordingly, any prior art reference that discloses a base layer and an insulating foil layer would not inherently possess the features recited in claim 1 unless they are necessarily present in the item described in the reference.

Claims 1-8 and 11-13 stand rejected under 35 U.S.C. §102 (a/e) as being anticipated by U.S. patent application publication No. US 2003/0160437 A1 to Ohji. Claim 1 is amended to recite that the thermally insulating foil layer 1) is on a side of the insulation foil that faces a gas flow and 2) has a distinctly lower thermal conductivity than the base layer and . Support for this feature is disclosed at paragraph [0008] of the present published patent application.

Anticipation requires a single prior art reference that discloses each element of the claim. *W.L. Gore & Associates v. Garlock, Inc.*, 220 UPSQ 303, 313 (Fed. Cir. 1983) *cert. denied* 469 U.S. 851 (1984). For a reference to anticipate a claim, “[t]here must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention.” *Scripps Clinic & Research Foundation v. Genentech Inc.*, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

Ohji does not disclose or suggest a thermal insulating foil layer that 1) is on a side of said insulation foil which faces a gas flow and 2) has a distinctly lower thermal conductivity than a base layer. Ohji discloses a gas generator having outflow openings 26a, 26b which are closed by seal tapes 27 having a seal layer made of metal and an adhesive layer. As disclosed at paragraphs [0098] and [0099] of Ohji, the seal tapes 27 closing the outflow openings 26a, 26b can have different rupturing pressures which are adjusted by the thickness of the seal tapes. According to Ohji, the seal tapes 27 are adhered to the housing 3 with the aluminum seal layer facing the gas flow. This aluminum layer has a distinctly higher thermal conductivity than the adhesive layer. Thus, in Ohji, the layer facing the gas flow has a higher thermal conductivity, which is in direct opposition to that which is recited in claim 1.

Also, the layers of Ohji do not inherently possess the features of the thermal insulating foil layer recited in claim 1. Arguments that are based on inherent properties cannot stand when there is no supporting teaching in the prior art. In re Spormann, 363 F.2d 444, 150 USPQ 449 (C.C.P.A. 1966). A limitation is inherently disclosed by a reference only if it is necessarily present and a person of ordinary skill in the art would recognize its presence. Crown Operations Int'l Ltd.v. Solutia Inc., 289 F.3d 1367, 1377, 62 USPQ.2d 1917, 1922-1923 (Fed. Cir. 2002). Inherency may not be established by probabilities or possibilities. Id. at 1923. One having ordinary skill in the art would recognize that the aluminum layer of Ohji, which faces the gas flow, would have a higher thermal conductivity than the adhesive. Therefore, the insulation foil in Ohji clearly does not inherently possess the features of the insulating foil layer recited in claim 1.

Furthermore, the opening of the outflow openings 26a, 26b in Ohji's gas generator is based on an entirely different principle than in the inventive gas generator. The seal tape 27 according to Ohji is destroyed depending on the interior pressure of the gas generator, while the invention provides for a temperature dependent release of the outflow openings. Thus, the rejection of claim 1 under 35 U.S.C. §102(a/e) as being anticipated by U.S. patent application publication No. 20030160437 issued to Ohji should be withdrawn.

Claims 1-8 and 11-13 stand rejected under 35 U.S.C. §102(e) as being anticipated by US patent No. 6,851,374 issued to Kelley et al. Attached to this amendment is a certified copy of an English translation of applicant's Utility Model filed in Germany on December 23, 2002. Applicants respectfully submit that this perfects the foreign priority date entitled the application under 35 U.S.C. §119.

Therefore, U.S. patent No. 6,851,374 issued to Kelley et al. filed on June 30, 2003, which is after the applicant's filing date of December 23, 2002, does not qualify as prior art under 35 U.S.C. 102(e). Thus, the rejection of claims 1-8 and 11-13 under 35 U.S.C. 102(e) as being anticipated by US patent No. 6,851,374 issued to Kelley et al should be withdrawn.

Therefore, in view of the above-mentioned reasons, claim 1 is allowable. Claims 5-8 and 10-13 depend from claim 1 and are therefore allowable as depending from an allowable claim and for the specific features recited therein.

Claim 2, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the thermally insulating foil layer is a plastic layer. Neither Ohji nor any of the other cited references discloses or suggests a thermally insulating foil layer that is a plastic layer. Claim 2 specifically requires a thermally insulating foil layer that is a plastic layer. Since Ohji does not disclose a thermally insulating foil layer that is a plastic layer, then Ohji does not anticipate claim 2. Thus, claim 2 is allowable.

Claim 4, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the base layer is made of metal. Neither Ohji nor any of the other cited references discloses or suggests this structure. Claim 4 specifically requires a base layer that is made of metal. Since Ohji does not disclose a base layer that is made of metal, then Ohji does not anticipate claim 4. Thus, claim 4 is allowable.

Claim 6, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the foil layer comprises a spray

coating. Neither Ohji nor any of the other cited references discloses or suggests this structure. Thus, claim 6 is allowable.

Claim 7, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the foil layer has regions of varying thickness for various outflow openings. Neither Ohji nor any of the other cited references discloses or suggests this structure. Thus, claim 7 is allowable.

Claim 10, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the base layer has front and rear sides which are covered by the foil layer. Neither Ohji nor any of the other cited references discloses or suggests this structure. Thus, claim 10 is allowable.

Claim 11, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the insulation foil is constructed such that, at an ambient temperature of greater than 75°C all of the outflow openings are opened by a generated gas. Neither Ohji nor any of the other cited references discloses or suggests this structure. Thus, claim 11 is allowable.

Claim 12, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that at least one insulation foil is constructed such that, at an ambient temperature of less than -25°C not all of the outflow openings are opened by a generated gas. Neither Ohji nor any of the other cited references discloses or suggests this structure. Thus, claim 12 is allowable.

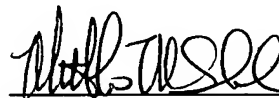
Claim 13, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that at least one insulation foil is constructed such that, at an ambient temperature of less than -25°C, one of the outflow openings closed by a thicker insulation foil compared to one of the outflow

opening closed by a thinner insulation foil is opened with a time delay that is greater by at least a factor four than a time delay which exists at an ambient temperature of greater than 75°C. Neither Ohji nor any of the other cited references discloses or suggests this structure. Thus, claim 13 is allowable.

In view of the foregoing, it is respectfully requested that the amendment should be entered and the application allowed.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Matthew M. Shaheen', is written over a horizontal line.

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